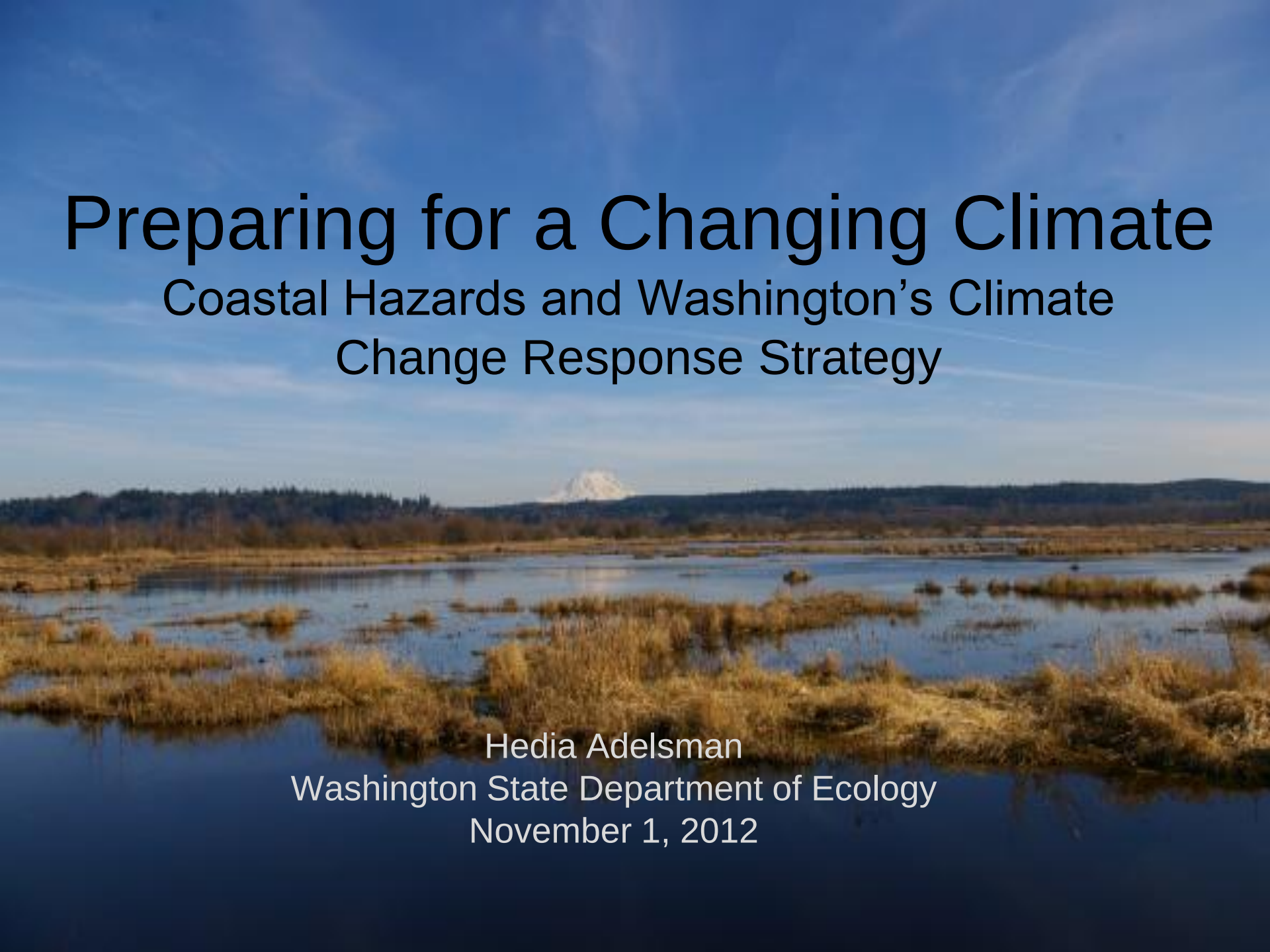


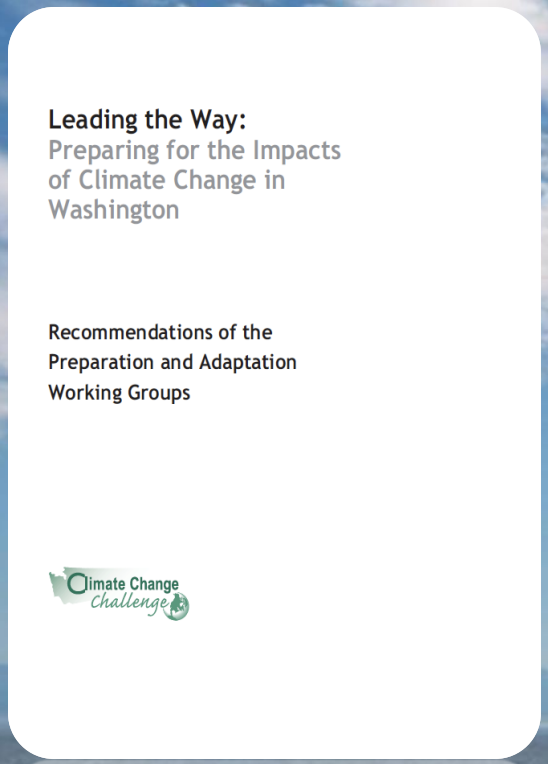
# Preparing for a Changing Climate

## Coastal Hazards and Washington's Climate Change Response Strategy

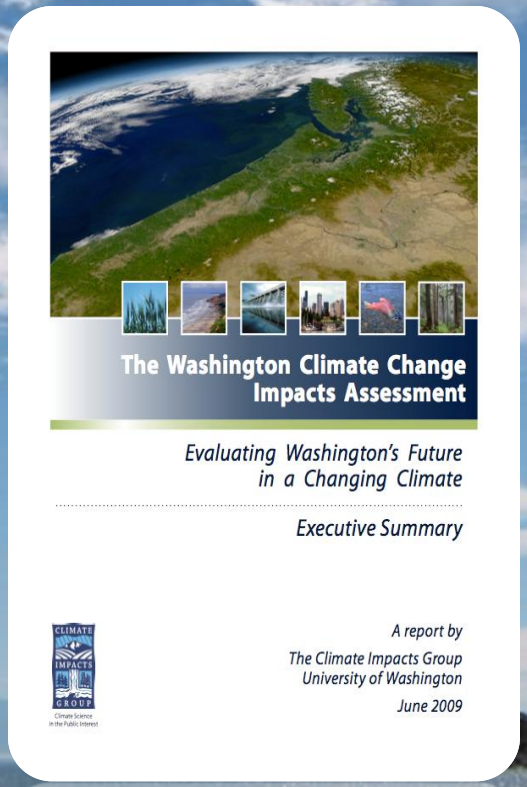
Hedia Adelsman
Washington State Department of Ecology
November 1, 2012

# Preparing for Climate Change Impacts in Washington

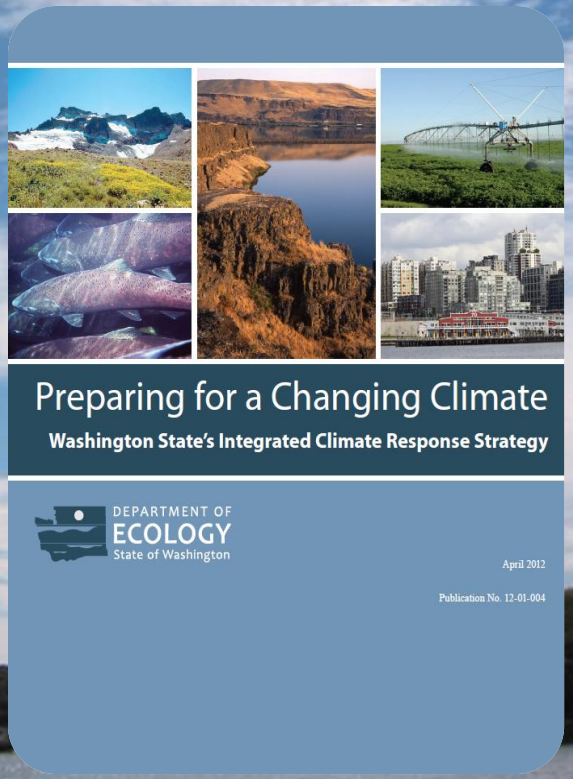
2008: Preparation and Adaptation Work Groups (Executive Order 07-02)



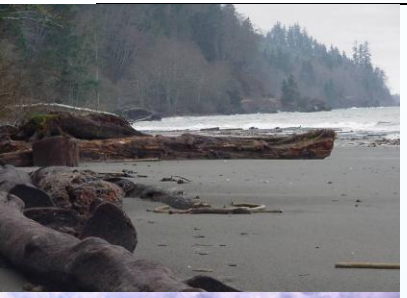

2009: The Washington Climate Change Impacts Assessment (HB 1303, 2007)




2012: Washington State's Integrated Climate Response Strategy (SB 5560, 2009)



# Key Priorities



- Protect people, communities, and natural systems
  - Protect vulnerable communities from heat, diseases and injuries
  - Reduce risks of damage to coastlines, buildings, and infrastructure
  - Safeguard fish, wildlife, habitats, and ecosystems
  - Improve water management
  - Reduce risk of fires, pests and diseases to agriculture and forestry
- Support the efforts of local governments and communities

# Risks to Coastal Areas

- More frequent and severe coastal flooding, increased erosion, and greater levels of storm damage along developed shorelines
- Increased risk of damage to property
- Ports, harbors and low-lying transportation networks will face increased risk of damage and disruptions
- Low-lying agricultural areas could be adversely affected by salt water inundation, dikes and levees will be threatened, and drainage will become more difficult
- Beaches and nearshore areas could shift inland or be lost

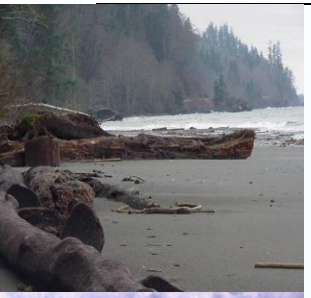
# Strategies for Coastal Areas

- Guide future development away from vulnerable areas
- Enhance emergency preparedness and response
- Accelerate efforts to protect and restore nearshore habitat and natural processes
- Protect vulnerable infrastructure by considering risks in planning, funding, designing, and constructing infrastructure
- Build local capacity by providing information, tools and guidance

# Addressing Climate Change

- Use existing state, local and federal laws to reduce risks of climate change:
  - GMA, SMA, CZMA, Watershed Planning Act, SEPA, Floodplain Management Act, Clean Water Act …
- How?
  - Is the policy, program, or investment sensitive to current and future changes in climate, such as increased temperature, reduced snow pack, increased precipitation, and severe and frequent storms?
  - What is the level of risk and vulnerability to climate impacts?
  - Will climate impacts alter the effectiveness of the existing plan, policy, program, or project?
  - Are adjustment or modifications needed to account for climate impacts and to help achieve the intended objectives?
- Develop a plan for near-term and long-term actions to implement the response strategy

# Current Initiatives



- WSDOT pilot vulnerability assessment (Nov. 2011)
- DFW climate adaptation handbook and pilot projects (fall 2012 – 2013)
- DNR climate adaptation plan (Dec. 2012)
- King tide photo initiative (Dec-Jan 2012)
- Ecology updating clearinghouse, inundation maps and developing sea level rise guidebook (spring 2013)
- West coast collaboration
  - BC-WA MOU
  - BC, CA, OR, and WA Roundtable on Climate-Smart Infrastructure (Nov. 2012)
  - West Coast Governor's Alliance on Ocean Health
- Regional science partnerships
- Blue Ribbon Panel on Ocean Acidification Report (Nov. 2012)

# Questions?

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